Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently Amended) The method according to claim [[1]]12, wherein the inserting of the first tag and the second tag ~~insertion in step b~~ comprises: the broadband access device independently inserting the first tag and the second tag ~~set in step a~~ into the ~~received~~ message received from the non-cascading port, or the broadband access device and a convergence layer device together being employed to insert the first tag and the second tag ~~set in step a~~ into the ~~received~~ message received from the non-cascading port.

3. (Canceled)

4. (Currently Amended) The method according to claim [[1]]12, ~~wherein the associated processing~~further ~~in step c comprises~~comprising:

[[c1.]]reforming the ~~received~~ message received from the non-cascading port and deciding whether the message received from the non-cascading port is a data message or a control message:

[[, and]]if [[it]]the message received from the non-cascading port is a data message, ~~executing step c2; if it is a control message, executing step c3;~~[[c2.]]removing the first tag and the second tag from the data message, checking binding relationship between the first and second tags in the data message and the IP address of user, performing security checking, and transferring the qualified data message being checked;

if the message received from the non-cascading port is a control message,[[c3.]] after implementing an authentication to the user of the control message, checking binding relationship between the user's account and physical access position according to the first and second tags

carried in the control message, performing user quantity control, and sending the <u>first and second</u> ta<u>gs</u>, the user account and password to an AAA server for ~~processing~~ authentication.

5. (Canceled)

6. (Currently Amended) The method according to claim [[1]]<u>12</u>, wherein ~~in step a,~~the <u>first</u> tag <u>corresponding to</u>~~set for~~ the broadband access device is a VLAN Path Identifier (VlanPI) tag, the<u> second</u> tag <u>corresponding to the</u>~~set for~~ non-cascading ~~access~~ port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag, and<u> said</u> message <u>received from the non-cascading port</u> is an Ethernet message.

7. (Currently Amended) The method according to claim 6, <u>wherein the first tag and the second tag are encapsulated in a fixed encapsulation format and</u> wherein the fixed encapsulation forma~~t in step b~~ <u>sequentially</u> comprises: ~~sequentially encapsulating~~destination Media Access Control (MAC) address, source MAC address, type of Ethernet VlanPI tag, VlanPI, type of Ethernet VlanCI tag, VlanCI, type of data message, data being transmitted, and checking field.

8. (Currently Amended) The method according to claim [[1]]1<u>2</u>, wherein ~~in step b~~ the broadband access device comprises: an IP DSLAM device, or an Ethernet switch, or a Cable Modem Termination System (CMTS) device using Hybrid Fiber Coax (HFC) system.

9. (Currently Amended) The method according to claim [[8]] <u>12, wherein the first tag corresponding to the first broadband access device is a VLAN Path Identifier (VlanPI) tag, the second tag corresponding to the non-cascading port in the first broadband access device is a VLAN Channel Identifier (VlanCI) tag, and said message received from the non-cascading port is an Ethernet message</u>, and wherein ~~when~~ the broadband access device ~~in step b~~ is an IP DSLAM device composed of main control board, user interface board and backboard, <u>and</u> the method ~~of inserting the VlanPI and the VlanCI in step b~~ further comprises ~~the steps of~~:

the user interface board inserting the VlanCI tag into the received Ethernet message and main control board inserting the VlanPI tag into the received Ethernet message[[,]]<u>;</u>

or, the user interface board inserting the VlanCI tag and the VlanPI tag into the received Ethernet message, and the main control board directly transferring this message according to the VlanPI tag and the destination MAC address <u>carried</u> in the Ethernet message[[,]]<u>;</u>

or, the user interface board inserting the VlanCI tag into the received Ethernet message, the main control board directly transferring this message according to the VlanCI tag and the destination MAC address in the Ethernet message, a convergence layer device inserting the VlanPI tag of the device from which the message is transmitted into the received Ethernet message without a VlanPI tag, and transferring the message according to this VlanPI tag and the destination MAC address in the Ethernet message.

10. (Currently Amended) The method according to claim [[1]]1<u>2</u>, wherein the user ~~in step e~~ is a general user or a user with a private tag of internal network.

11. (Currently Amended) The method according to claim 10, <u>wherein the second tag</u> <u>corresponding to the non-cascading port in the first broadband access device is a VLAN Channel</u> <u>Identifier (VlanCI) tag, and</u> wherein ~~when~~ the user with <u>an</u> inserted tag is a user with <u>a</u> private tag of internal network, <u>and</u> ~~in step b,~~ the information of the private tag of internal network is encapsulated in the VlanCI tag.

12. (New) A method for identifying user position, comprising:

setting a first tag corresponding to each of broadband access devices and a second tag corresponding to each of non-cascading ports in each of the broadband access devices, wherein the first tag and the second tag are employed to identify user positions; and wherein:

when a port receiving a message in a broadband access device among the broadband access devices is a cascading port, transferring the message received from the cascading port; and when a port receiving a message in the broadband access device is a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag; and

when a broadband access server receiving the message carrying the first tag and the second tag from the non-cascading port, identifying, by the broadband access server, user position according to the first tag and the second tag inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

13. (New) A broadband access device, comprising: one or more cascading ports and one or more non-cascading ports, wherein a first tag is provided for identifying the broadband access device, and a second tag is provided for identifying each of the non-cascading ports, and the first tag and the second tag are employed to identify user positions; and

the broadband access device is capable of receiving a message from one of the cascading ports, and transferring the message received from the cascading port;

the broadband access device is capable of receiving a message from one of the non-cascading ports, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag for identifying user position.

14. (New) The broadband access device according to claim 13, wherein the first tag corresponding to the broadband access device is a VLAN Path Identifier (VlanPI) tag;

the second tag corresponding to the non-cascading port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag; and

the message received from the non-cascading port is an Ethernet message.

15. (New) The broadband access device according to claim 13, wherein the first tag and the second tag are encapsulated in a fixed format.

16. (New) The broadband access device according to claim 15, wherein the fixed format comprises information on destination Media Access Control, MAC, address, source MAC

address, type of Ethernet VlanPI tag, VlanPI, type of Ethernet VlanCI tag, VlanCI, type of data message, data being transmitted, and checking field.

17. (New) The broadband access device according to claim 13, wherein the broadband access device comprises an IP Digital Subscriber Line Access Multiplexer (DSLAM) device, or an Ethernet switch, or a Cable Modem Termination System (CMTS) device using Hybrid Fiber Coax (HFC) system.

18. (New) The broadband access device according to claim 16, wherein the first tag corresponding to the broadband access device is a VLAN Path Identifier (VlanPI) tag, and

the second tag corresponding to the non-cascading port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag; and

wherein the broadband access device comprises a main control board, a user interface board and a backboard;

the user interface board is capable of inserting the VlanCI tag into the message received from the non-cascading port, and the main control board is capable of inserting the VlanPI tag into the message received from the non-cascading port;

or the user interface board is capable of inserting the VlanCI tag and the VlanPI tag into the message received from the non-cascading port, and the main control board is capable of transferring the message according to the VlanPI tag and the destination MAC address carried in the message received from the non-cascading port;

or the user interface board is capable of inserting the VlanCI tag into the message received from the non-cascading port, and the main control board is capable of transferring the message received from the non-cascading port according to the VlanCI tag and the destination MAC address carried in the message received from the non-cascading port.

19. (New) A system for identifying user position, comprising: a plurality of broadband access devices and a broadband access server, each of the broadband access devices is provided with a first tag, and each of non-cascading ports in the broadband access device is provided with a second tag, and the first tag and the second tag are employed to identify user positions; wherein

a broadband access device among the plurality of broadband access devices is capable of receiving a message from a non-cascading port, inserting the first tag corresponding to the broadband access device and the second tag corresponding to the non-cascading port into the message received from the non-cascading port, and transferring the message with the inserted first tag and second tag;

the broadband access server is capable of receiving the message carrying the first tag and the second tag, and identifying the user position according to the first tag and the second tag having been inserted into the message; wherein the broadband access server knows through which broadband access device the user is connected according to the first tag, and through which port of the broadband access device the user is connected according to the second tag.

20. (New) The system according to claim 19, further comprising: a convergence layer device; and

the first tag and the second tag are inserted, by the broadband access device and the convergence layer device, into the message received from the non-cascading port.

21. (New) The system according to claim 20, wherein the first tag corresponding to the broadband access device is a VLAN Path Identifier (VlanPI) tag, and

wherein the convergence layer device is capable of inserting the VlanPI tag of the device from which the message is transmitted, into the message without a VlanPI tag, and transferring the message according to the VlanPI tag and the destination MAC address carried in the message.

22. (New) The system according to claim 19, wherein the broadband access device is capable of independently inserting the first tag and the second tag into the message received from the non-cascading port.

23. (New) The system according to claim 19, wherein the broadband access server is capable of:

reforming the message and deciding whether the message is a data message or a control message; and

removing the first tag and the second tag from the data message if the message is a data message, checking binding relationship between the first tag and the second tag carried in the data message and the IP address of user, performing security checking, and transferring the data message when the data message is qualified;

authenticating the user of the control message if the message is a control message, checking binding relationship between the user account and the user position according to the first tag and the second tag carried in the control message, performing user quantity control, and sending the first tag and the second tag, the user account and password to an AAA server for authentication.

24. (New) The system according to claim 19, wherein the user is a general user or a user with a private tag of internal network.

25. (New) The system according to claim 19, wherein the second tag corresponding to the non-cascading port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag, and

wherein the user is a user with a private tag of internal network, and the information of the private tag of internal network is encapsulated into the VlanCI tag.